

# White House Documentation Projects

Frederick J. Lindstrom

**F**ew people realize that the White House is designated Washington, D.C.'s Park Reservation No. 1. However, only the grounds and exterior walls of the house carry that designation. The central residential portion of the house is under the auspices of the independent, non-political Executive Residence, managed by the Chief Usher Gary Walters and his staff. The East and West Wings are managed by the General Services Administration. In 1988, the White House, in cooperation with the Office of White House



North elevation of the White House being repainted.  
Photo by Jack E. Boucher, 1989, HABS.

Liaison of the National Capital Region of the National Park Service (NPS) and HABS, began a five-year documentation program to record the exterior elevations of the original central portion of the residence. This documentation project was to be a component of a larger restoration effort that had begun earlier to clean, repair and repaint the exterior walls. In early 1990, the American Institute of Architects in cooperation with the

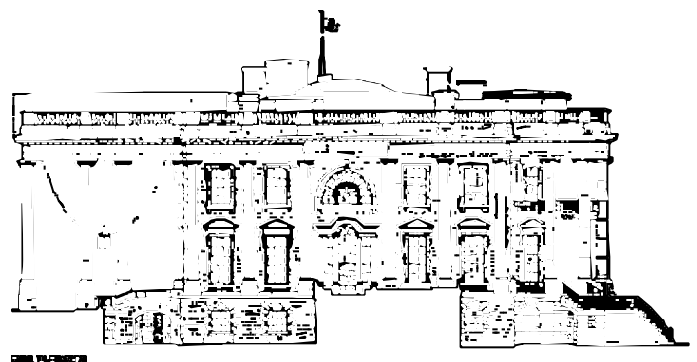
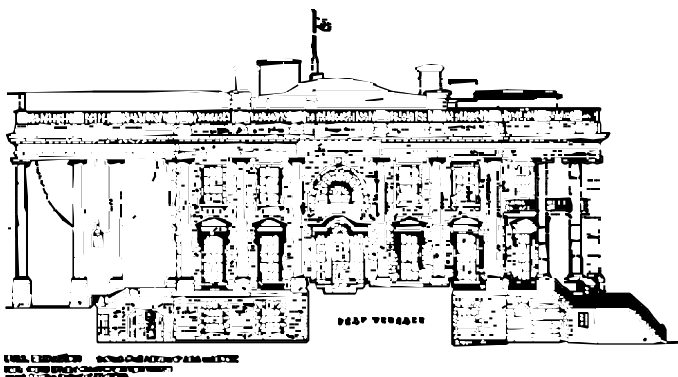
White House Historical Association sponsored HABS to record the interior architecture of the White House to celebrate, on October 13, 1992, the 200th anniversary of the laying of the cornerstone. This project was to be a complement to the ongoing exterior documentation program and was scheduled to run continuously, until October of 1992, so that the drawings of both projects would be completed by the 200th anniversary.



South porch of the White House with the scaffolding of the stone masons.  
Photo by Jack E. Boucher, 1991, HABS.

The exterior documentation was initially established during the summer months of 1988, 1989, and 1990 with small teams of four architectural technicians and an architect supervisor working intensely for 12 weeks. As 32 different paint layers were removed and the Aquia sandstone facing repaired, HABS began to systematically record the exterior of the structure. This was a first time opportunity to document the stone exterior. The house, historically, has always been painted except for the first few years after its construction when the masonry and mortar were allowed to dry, and for a similar period after the reconstruction following its burning during the War of 1812.

The summer teams hand measured the previously obscured carved detail and mortar joints. Each stone was measured and overall dimensions of the facades were taken in order to generate existing condition scaled drawings of all four elevations with variations removing the north and south porches to reveal the back walls.



Final HABS sheet of the 1/8" scale reductions of the west elevation with and without the stone graining. All of the elevations were drawn originally at 1/4" to maintain a high level of detail and will appear in the final set in both 1/4" and 1/8" scales. Drawn by Douglas Anderson, Isabel Chia-Ya Yang, Timothy A. Buehner, and Eric Schmidt, 1990-92, HABS.

Using prints of the photogrammetric plates produced by Dennett, Muessig, Ryan and Associates in 1984 and 1990 and HABS staff photographer Jack E. Boucher's 5" x 7" large-format, black and white images of the bare Aquia sandstone facing, the teams rendered copies of the base drawings of the elevations with the stone graining as it was revealed. The drawings and photographs of the bare walls are the only record of what the house looks like unpainted. Larger scale drawings of details such as the exquisite stone carving on the north entry doorway, the second-floor fan windows, the two different cornice profiles, and the iron lanterns of the south entrance were produced. Details representing each of the typical window configurations were also generated. These drawings are examples of precision technical delineation.



Photograph of the north entry door, stripped of the 32 coats of paint that had occluded the stone carving. Photo by Jack E. Boucher, 1989, HABS.



Detail drawing of the north entry door of the White House. Delineated by Richard A. Ventrone, Jr., Timothy A. Buehner, Ronald M. Bailey, Scot C. McBroom, Paul G. Homeyer, and Douglas Anderson, 1989-92, HABS.

With the assistance and guidance of the White House Office of the Curator and the White House Usher's Office, the HABS White House Interiors Documentation Project was begun in June of 1990. Prior to the start of on-site work, an analysis and planning document was produced, listing by room every wall, closet, molding, and architectural element. Each feature that was to be drawn or photographed was listed and then annotated with descriptive comments citing the date when it was placed in the house and identifying the moldings as "typicals" when they were commonly found in other rooms. Also, every feature was labeled to indicate in which final drawing it would appear. As the schedules of the President, First Lady, and the Residence are highly dynamic, this document became a critical part of organizing and tracking each day's field work. Often the team would start work in a room and because of scheduled or unscheduled events in the Residence, they would be required to relocate to another part of the house. Sometimes they would not return to that room to resume measuring for days, weeks, or in some cases, months. Working closely with Chief Usher Walters, the team was allowed, with the exception of a few intervals, to be continuously on site sketching and measuring the interior architectural features for approximately 15 months.

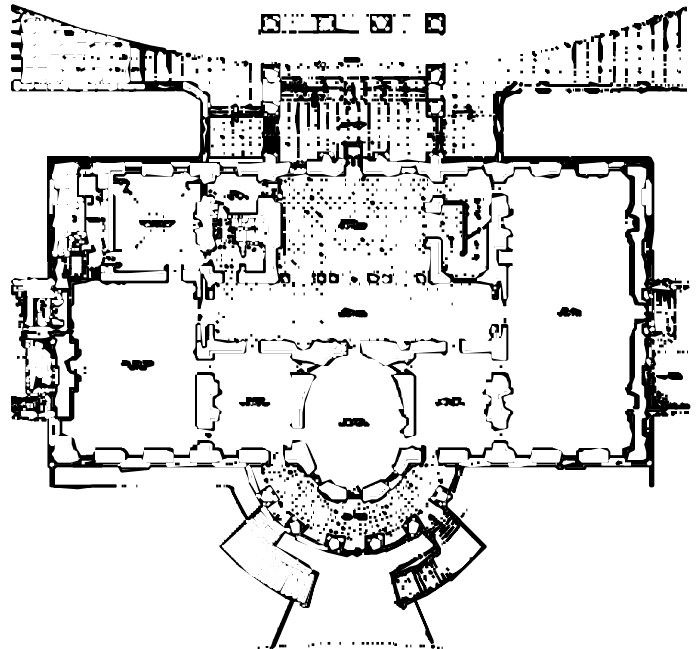


The White House interiors team at work measuring the ceiling of the east room of the White House. Photo by Frederick J. Lindstrom, 1991, HABS.

During this period, the comprehensive photographic record of the interiors was also initiated. The photography had to be scheduled as closely and as carefully as the measuring. Routinely, both would be underway simultaneously, but in different rooms, complicating the scheduling problems. Whenever the HABS architects or photographer was in the house, there was always an escort, who was either a member of the house staff, or more often a uniformed Secret Service officer. The team, with their escort, had to move throughout the house as a group. This required additional time allowances for moving within and around the house, as did the necessity to clear a security check each time the team entered the grounds. If it had not been for the diligence and flexibility of the ushers, the field work would not have progressed as smoothly and efficiently as it did.

The on-site recording was done with traditional hand-measuring techniques, sketching, annotating, and using

*(White House—continued on page 12)*



Final ink on Mylar line drawing of the first (State) floor of the White House. Delineated by Gillian B. Lewis, Kenneth W. Martin, and Scot C. McBroom; preliminary by Gillian B. Lewis, 1990-92, HABS.

basic tools for taking dimensions such as measuring tapes, rulers, levels, and plumb lines. A Lietz telescoping Digital Reading Measure Pole was used for ceiling heights, reducing the use of bulky ladders. These methods are labor and time intensive but are highly accurate. The team had to carefully work around the furniture and art objects. Whenever a piece of furniture was blocking access to a detail or a lamp was in the way of extending a measuring tape across a room, the team would have to stop and request the house staff to move the individual piece. This was done only when necessary and many times alternative strategies were invoked to measure around furniture, crystal chandeliers and art work. All dimensions were taken to the nearest 1/8", with some of the more intricate details measured to the closest 1/32". All large-scale details were carefully drawn in the field notes at full scale to eliminate any errors in scale translations.

After the first months of on-site field work, the teams started to develop the preliminary pencil drawings. This initially was done whenever they were not scheduled to be at the house. As the projects progressed and the bulk of the field work was completed, the teams concentrated on laying out the preliminary drawings. Once the preliminaries were set, the teams would then over-lay them with Mylar and redraw in ink, rendering what was called a process drawing. The different exterior teams had limited goals for each summer so as to allow them the experience of each step in creating a HABS measured drawing. The results of the interior and exterior projects were combined in the last stage of producing HABS measured drawings. The final step was to reproduce the drawings into HABS standard sheet formats. This was done using line negatives with a direct photographic reproduction method to transfer the process drawings to HABS Mylar. Included in this stage was the addition of notations, dimensions, titles, and other graphic symbols to complete the final drawings.

With the 2 projects combined, a total of 31 team members generated approximately 850 pages of field notes, 42 preliminary ink-on-film process drawings, 88 sheets of final inked HABS sheets, and approximately 2,200 35mm field photographs. More than 700 large format black and white, and color photographs were produced recording all the rooms inside the residence, the exterior elevations, and the grounds.

In February of 1992, the American Institute of Architects (AIA) and the American Architectural

Foundation in cooperation with The White House Historical Association organized an exhibit of historical drawings and photographs of the White House. This exhibition, "The White House 1792-1992: Image in Architecture," opened at the Octagon in Washington, DC and brought together for the first time many previously unseen drawings of the house. HABS had the privilege to display an assortment of the original project materials in the lobby of the AIA building. Following this exhibition in June, The AIA Press published William Seale's *The White House, The History of an American Idea*. Throughout the book many photographs and drawings from the documentation projects have been used for illustrations, with

most of the drawings concentrated in the chapters dealing with contemporary history.

The last step in the project will be transmitting the documentation to the Library of Congress.<sup>1</sup> Before the set is sent to the Library, each photograph and negative will be individually identified, numbered, labeled and indexed, as will the drawings and the rest of the field materials. The

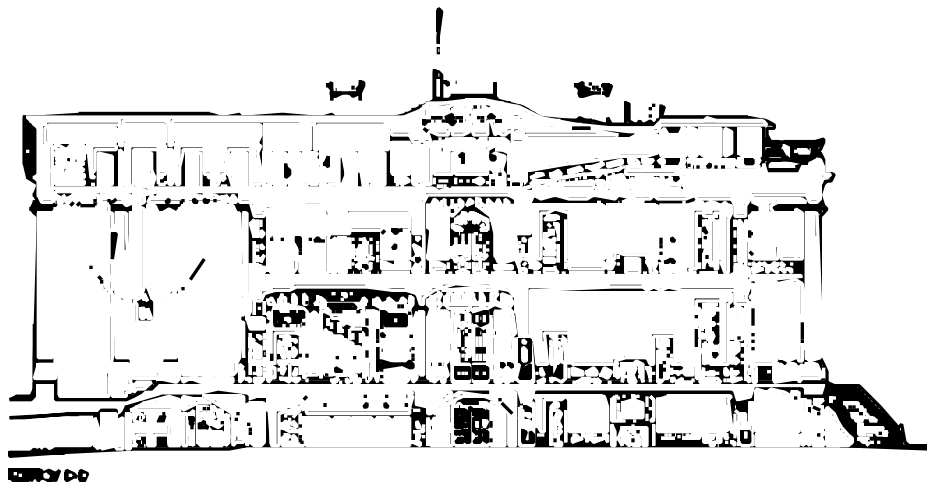
final set of documentation drawings and photographs will have a 500-year service life and will be placed in the HABS/HAER collection in the Library of Congress' Prints and Photographs Division in early 1993.

There are more than 22,000 identified sheets of drawings of the White House.<sup>2</sup> Of those drawings, HABS will have produced the only comprehensive set of documents accurately recording the historic main house as it stands today. These drawings and photographs will be used as baseline documents for future renovation, restoration, maintenance and interpretation of the President's House.

<sup>1</sup> Approximately one-third of the documentation will be transmitted to the Library of Congress.

<sup>2</sup> The White House Architectural Drawing Project, David Krause project supervisor, has identified and cataloged more than 22,000 sheets of architectural, structural, mechanical, and historical drawings pertaining to the White House. This project is supported by the National Capital Region-White House Liaison and the Executive Support Facility. The HABS documentation drawings, field notes, preliminary and final ink drawings, have been included in this database.

Frederick J. Lindstrom is a HABS architect and the project supervisor for the White House Documentation Projects. Lindstrom's work with HABS started in 1987 documenting the Virginia Governor's Mansion in Richmond. He has also supervised the recording projects at the Virginia State Capitol Building, and the Cape Hatteras Light House.



Transverse Building Section of the White House. Delineated by Douglas Anderson, 1990-92, HABS.